What is claimed is;

1.   A digital camera comprising:

an image-capturing device that captures a subject image having passed through a taking lens and outputs
5   image data;

a recording processing circuit that performs recording processing on image data; and

an image processing circuit that first performs pre-treatment on image data corresponding to N lines X M rows
10   output by said image-capturing device in units of individual lines in line sequence and then performs format processing appropriate for recording performed at said recording processing circuit on the image data having undergone said pre-treatment in units of blocks each
15   ranging over n lines X m rows (N>n, M>m) in block sequence.

2.   A digital camera according to claim 1, wherein; said recording processing circuit is constituted of a compression circuit that compresses the image data.

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3.   A digital camera according to claim 1, wherein; said pre-treatment includes gamma correction and white balance correction, and said format processing includes interpolation processing, LPF processing, BPF
25   processing and color difference signal calculation

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processing.

4.   A storage medium for image processing having a
program stored therein that executes;

5   format processing in which image data of an image
captured at an image-capturing device are formatted for
recording;
          various types of pre-treatment implemented prior to
said format processing; and

10   recording processing in which image data having
undergone said format processing are recorded,
          during said pre-treatment, line sequence signal
processing being performed on image data corresponding to
N lines X M rows in units of individual lines and during

15   format processing, block sequence signal processing being
performed on image data having undergone said pre-
treatment in units of blocks each ranging over n lines X m
rows (N > n, M > m).

20   5.   A storage medium for image processing according to
claim 4, wherein;
          said recording processing is compression processing
in which the image data are compressed.

25   6.   A storage medium for image processing according to

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claim 4, wherein;

said pre-treatment includes gamma correction and white balance correction and said format processing includes interpolation processing, LPF processing, BPF

5   processing and color difference signal calculation processing.

7.   A digital camera comprising;

an image-capturing device that captures a subject

10   image having passed through a taking lens and outputs image data;

a recording processing circuit that performs recording processing on image data; and

an image processing circuit that, with the image data

15   output by said image-capturing device input as data corresponding to n lines X m rows, calculates a color difference signal based upon the image data thus input, performs interpolation processing and low pass filtering processing simultaneously on said color difference signal

20   using filter coefficients for interpolation/low pass filtering and then performs matrix processing appropriate for recording performed at said recording processing circuit to generate a formatted signal.

25   8.   A digital camera according to claim 7, wherein;

said recording processing circuit is constituted of a compression circuit that compresses the image data.

9.   A storage medium for image processing having a
5   program stored therein that executes;

format processing to format image data of an image captured at an image-capturing device for recording, in which color difference signals corresponding to n lines X m rows are calculated using image data that are input,
10   interpolation processing and low pass filtering processing are performed simultaneously on the color difference signals corresponding to n lines X m rows using filter coefficients for interpolation/low pass filtering and then a formatted signal is generated by implementing matrix
15   processing; and

recording processing in which image data having undergone said format processing are recorded.

10.   A storage medium for image processing according to
20   claim 9, wherein;

said recording processing is compression processing in which said image data are compressed.

11.   A digital camera comprising;
25   an image-capturing device that captures a subject

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image having passed through a taking lens and outputs
image data;

an image processing circuit that performs image
processing including data format processing appropriate
5   for data compression on the image data output by said
image-capturing device; and

a compression circuit that compresses the image data
output by said image processing circuit, wherein;

said image processing circuit engages in median
10   processing on image data corresponding to an n X m pixel
area block during said format processing.

12. A digital camera according to claim 11, wherein;
said median processing is performed on (n-i) X (m-j)
15   sets of image data extracted from the image data
corresponding to said n X m pixel area.

13. A digital camera comprising;
an image-capturing device that captures a subject
20   image having passed through a taking lens and outputs
image data; and

an image processing circuit that executes image
processing in which median processing is performed on (n-
i) X (m-j) sets of image data extracted from image data
25   corresponding to an n X m pixel area block for the image

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data output by said image-capturing device.

14. A storage medium for image processing having a program stored therein that executes;

   format processing in which image data of an image captured at an image-capturing device are formatted for compression;

   various types of signal processing implemented prior to said format processing; and

   compression processing in which the image data having undergone said format processing are compressed,

   in said format processing, median processing being performed on image data corresponding to an n X m pixel area block.

15. A storage medium for image processing according to claim 14, wherein;

   said median processing is performed on (n - i) X (m-j) sets of image data extracted from the image data corresponding to an n X m pixel area block.

16. A storage medium for image processing having a program stored therein, that executes median processing on (n-i) X (m-j) sets of image data extracted from image data corresponding to an n X m pixel area block when

implementing a specific type of image processing on image data of an image captured at an image-capturing device.

17.   A digital camera comprising;

an image-capturing device that captures a subject image having passed through a taking lens and outputs image data;

a white balance adjustment circuit that performs white balance adjustment on the image data output by said image-capturing device;

a white balance fine adjustment coefficient calculation circuit that calculates white balance fine adjustment coefficients based upon image data having undergone white balance adjustment output by said white balance adjustment circuit; and

a white balance fine adjustment circuit that performs white balance fine adjustment on the image data having undergone the white balance adjustment output by said white balance adjustment circuit using said white balance fine adjustment coefficients.

18.   A digital camera according to claim 17, wherein;

said white balance fine adjustment coefficient calculation circuit calculates average values of R, B and G signals in the image data having undergone white balance

adjustment and calculates white balance fine adjustment coefficients based upon average values.

19. A digital camera according to claim 17, wherein;

said white balance fine adjustment coefficient calculation circuit calculates histograms of brightness levels of R, B and G signals in the image data having undergone white balance adjustment and calculates white balance fine adjustment coefficients based upon the histograms.

20. A storage medium for image processing having a program stored therein that executes;

white balance adjustment processing in which white balance adjustment is performed on image data of an image captured at an image-capturing device;

white balance fine adjustment coefficient calculation processing in which white balance fine adjustment coefficients are calculated using image data having undergone white balance adjustment through said white balance adjustment processing; and

white balance fine adjustment processing in which white balance fine adjustment is performed on image data having undergone white balance adjustment using said white balance fine adjustment coefficients.

21.   A storage medium for image processing according to claim 20, wherein;

in said white balance fine adjustment coefficient

5   calculation processing, average values of R and B signals in the image data having undergone white balance adjustment are calculated and white balance fine adjustment coefficients are calculated based upon the average values.

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22.   A storage medium for image processing according to claim 20, wherein;

in said white balance fine adjustment coefficient calculation processing, histograms of brightness levels of

15   R, B and G signals in the image data having undergone white balance adjustment are calculated and white balance fine adjustment coefficients are calculated based upon the histograms.

20   23.   A digital camera comprising;

an image-capturing device that captures a subject image having passed through a taking lens and outputs image data;

a white balance adjustment circuit that performs

25   white balance adjustment on the image data output by said

image-capturing device;

an image area selection apparatus that selects one image area from a preset plurality of image areas;

a white balance fine adjustment coefficient

5   calculation circuit that calculates white balance fine adjustment coefficients based upon image data within an area set in relation to an image area selected by said image area selection apparatus, in image data having undergone white balance adjustment output by said white

10   balance adjustment circuit; and

a white balance fine adjustment circuit that performs white balance fine adjustment using said white balance fine adjustment coefficients calculated at said white balance fine adjustment coefficient calculation circuit.

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24.   A digital camera according to claim 23, further comprising;

a focal point detection device that detects focal adjustment statuses relative to various subjects in a

20   preset plurality of focal white detection areas; and

a focal point detection area selection apparatus that selects one of said plurality of focal point detection areas based upon the focal adjustment statuses, wherein;

said image area selection apparatus selects image

25   data in an image area set in relation to the focal point

detection area selected by said focal point detection area selection apparatus.

25. A digital camera according to claim 23, wherein;
said white balance fine adjustment coefficient calculation circuit calculates average values of R, G and B signals in data in an image area selected by said image area selection apparatus after the white balance adjustment and calculates white balance fine adjustment coefficients based upon the average values.

26. A digital camera according to claim 23, wherein;
said white balance fine adjustment coefficient calculation circuit calculates histograms of brightness levels of R, G and B signals in data in an image area selected by said image area selection apparatus after the white balance adjustment and calculates white balance fine adjustment coefficients based upon the histograms.

27. A storage medium for image processing having a program stored therein that executes;
white balance adjustment processing in which white balance adjustment is performed on image data of an image captured at an image-capturing device;
image area selection processing in which an image

area is selected from a preset plurality of image areas;

white balance fine adjustment coefficient calculation processing in which white balance fine adjustment coefficients are calculated using image data within an

5   area set in relation to the image area selected through said image area selection processing; and

white balance fine adjustment processing in which white balance fine adjustment is performed on image data having undergone white balance adjustment using white

10   balance fine adjustment coefficients.

28. A storage medium for image processing according to claim 27, wherein;

in said image area selection processing, information

15   related to a focal point detection area from which a focal adjustment status used for a focus matching operation at a taking lens has been detected among a preset plurality of focal point detection areas is used as a basis for selecting an image area related to said focal point

20   detection area.

29. A storage medium for image processing according to claim 27, wherein;

in said white balance fine adjustment coefficient

25   calculation processing, average values of R, G and B

signals in image data in an image area selected through said image area selection processing after the white balance adjustment are calculated and white balance fine adjustment coefficients are calculated based upon the

5   average values.

30. A storage medium for image processing according to claim 27, wherein;

in said white balance fine adjustment coefficient

10   calculation processing, histograms of brightness levels of R, G and B signals in image data in an image area selected through said image area selection processing after the white balance adjustment are calculated and white balance fine adjustment coefficients are calculated based upon the

15   histograms.

31. A carrier wave encoded to transmit a control program
        for white balance adjustment on image data ,the
        control program including instructions for;

20   white balance adjustment processing in which white balance adjustment is performed on image data of an image captured at an image-capturing device;

image area selection processing in which an image area is selected from a preset plurality of image areas;

25   white balance fine adjustment coefficient calculation

processing in which white balance fine adjustment

coefficients are calculated using image data within an

area set in relation to the image area selected through

said image area selection processing; and

5   white balance fine adjustment processing in which

white balance fine adjustment is performed on image data

having undergone white balance adjustment using white

balance fine adjustment coefficients.

10   32. A carrier wave according to claim 31,wherein;

in said image area selection processing, information

related to a focal point detection area from which a focal

adjustment status used for a focus matching operation at a

taking lens has been detected among a preset plurality of

15   focal point detection areas is used as a basis for

selecting an image area related to said focal point

detection area.

33. A carrier wave according to claim 31,wherein;

20   in said white balance fine adjustment coefficient

calculation processing, average values of R, G and B

signals in image data in an image area selected through

said image area selection processing after the white

balance adjustment are calculated and white balance fine

25   adjustment coefficients are calculated based upon the

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average values.

34.   A carrier wave according to claim 31,wherein;

in said white balance fine adjustment coefficient

5   calculation processing, histograms of brightness levels of

R, G and B signals in image data in an image area selected

through said image area selection processing after the

white balance adjustment are calculated and white balance

fine adjustment coefficients are calculated based upon the

10   histograms.

35.   An electronic camera comprising:

an image-capturing device;

a first signal processing unit that performs, at

15   least, A/D conversion on an image signal generated by said

image-capturing device to convert the image signal to

digital image data;

a second signal processing unit that performs

irreversible signal processing on the image data resulting

20   from conversion at said first signal processing unit;

an image memory capable of temporarily storing the

image data; and

an operation control unit that dynamically selects a

signal path between said two signal processing units in

25   correspondence to an operation mode set to either (1) or

(2) below:

(1)   a fast mode, in which a sequence of signal
processing operations is executed continuously by
providing an output from said first signal processing unit

5   to said second signal processing unit and engaging said
two signal processing units in synchronous operation;

(2)   an original image mode, in which an output from
said first signal processing unit is stored in said image
memory, image data read out from said image memory are

10   provided to said second signal processing unit and said
two signal processing units are made to engage in
operations, each performed with a timing different from
the timing of the other.

15   36.   An electronic camera according to claim 35, wherein:
said operation control unit utilizes a "storage area
in said image memory provided to store the output from
said first signal processing unit in said original image
mode" as a buffer area for keeping in retreat image data

20   undergoing processing in said fast mode.

37.   An electronic camera according to claim 35, wherein:
said operation control unit accepts an external
operation indicating whether or not raw data (image data

25   yet to undergo irreversible signal processing performed by

said second signal processing unit) are required, selects

and executes said fast mode if the operation indicates

that no raw data are required and selects and executes

said original image mode if the operation indicates that

5   raw data are required to output to an outside (or to store

in a recording medium) raw data present in said image

memory.

38.   An electronic camera according to claim 35, wherein:

10   said operation control unit sets an operation clock

of said second signal processing unit faster than an

operation clock of said first signal processing unit in

said original image mode.

15   39.   An electronic camera according to claim 35, wherein:

said second signal processing unit performs, at least,

either "irreversible gradation conversion" or

"irreversible pixel thinning."